



Animal and Plant  
Health Inspection  
Service

Veterinary Services

Center for Veterinary  
Biologics

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## **Escherichia coli Anti-987P Pilus Polyclonal Antibody (987P PAb) - Lot ID IRP 534-06**

**Document Number:** CVB-DAT-0093

**Revision:** 02

**Previous Number:** BB DAT0114.04

**Vault:** CVB-Released

**Section/Area:** CVB-DAT

**Effective Date:** 24 May 2021

**Notes:** *Strain or Source: N/A, Fill date: March 23, 2006*

United States Department of Agriculture  
Animal and Plant Health Inspection Service  
Center for Veterinary Biologics  
P. O. Box 844  
Ames, IA 50010

1. **Reagent Name:** *Escherichia coli* Anti-987P Pilus Polyclonal Antibody (987P PAb)
2. **Strain or Source:** Not applicable
3. **Lot Number:** IRP 534-06
4. **Fill Date:** March 23, 2006
5. **Expiration Date:** April 30, 2022

**Precautions:** There are no known hazards associated with the use of this reagent.

6. **Intended Use:** For use in potency testing of *E. coli* biological containing the 987P pilus antigen, according to **Supplemental Assay Method 622 (SAM 622)**.
7. **Instructions for Use:** Dilute the 987P PAb 1:3,000 in cold carbonate-bicarbonate coating buffer (0.05M, pH 9.6), and use immediately according to **SAM 622**.
8. **Test of Reagent:** The 987P PAb was evaluated using enzyme-linked immunosorbent assays. The 987P PAb was shown to be specific for 987P pilus antigen, with negligible reactivity against other pilus types and non-piliated mutants of *E. coli*. It exhibits minimal nonspecific binding in assays performed according to **SAM 622**. The optimal use dilution was determined by titration using the assay described in **SAM 622**.
9. **Container Size, Type, Weight, or Volume:** 100- $\mu$ L aliquots in microfuge vials (lot size 99.5 mL).
10. **Storage Conditions:** -20°C or lower for long term storage. May be held at 2°- 7°C for several weeks.
11. **CVB Technical Contact:** Bacteriology Section, Center for Veterinary Biologics, (515) 337-7020 or FAX (515) 337-7673.
12. **Origin and Passage History:** Not applicable
13. **Method of Preparation:** The 987P PAb was produced in New Zealand White rabbits. Each rabbit received six intravenous doses of *E. coli* 987 at weekly intervals. The first four doses contained formalin-killed *E. coli* 987 (IRP 531-05), the final two doses were live *E. coli* 987

(IRP 531-05). Serum was harvested, pooled, adsorbed against three *E. coli* strains, each expressing a different pilus type, including K88, K99, and F41, to remove antibodies not specific for 987P pili. The 987P PAb was filter sterilized, aliquoted, and frozen at -70°C or lower.

**Other:**

**Restrictions:** Only for use in potency testing of *E. coli* biologicals according to Supplemental Assay Method 622.

Reagent orders and feedback should be sent *including phone number* to the following email address: [VS.DB.CVB.Reagent.Requests@usda.gov](mailto:VS.DB.CVB.Reagent.Requests@usda.gov)

Reagent orders forms (APHIS Form 2018) can be found on the CVB website.